

## **SUBCHAPTER L : LOCATION RESTRICTIONS**

### **§330.300. Airport Safety.**

(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft shall demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.

(b) Owners or operators proposing to site new MSWLF units and lateral expansions located within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration (FAA).

(c) The owner or operator shall submit the demonstration in subsection (a) of this section with a permit application, a permit amendment application or a permit transfer request. The demonstration will be considered a part of the operating record once approved.

(d) Sites disposing of putrescible waste shall not be located in areas where the attraction of birds can cause a significant bird hazard to low-flying aircraft. Guidelines regarding location of landfills near airports can be found in Federal Aviation Administration Order 5200.5(A), 1/31/90. All landfill sites within five miles of an airport shall be critically evaluated to determine if an incompatibility exists.

### **§330.301. Floodplains.**

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains shall demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator shall submit the demonstration with a permit application, a permit amendment application, or a permit transfer request. The demonstration shall become part of the operating record once approved.

### **§330.302. Wetlands.**

New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator makes each of the demonstrations identified in paragraphs (1)-(5) of this section to the executive director. The owner or operator shall submit the demonstrations with a permit application. The demonstration shall become part of the operating record once approved.

(1) Where applicable under the Clean Water Act, §404 or applicable State wetlands laws, the presumption that a practicable alternative to the proposed landfill is available that does not involve wetlands shall be clearly rebutted.

(2) The construction and operation of the MSWLF unit shall not:

(A) cause or contribute to violations of any applicable State water quality standard;

(B) violate any applicable toxic effluent standard or prohibition under of the Clean Water Act, §307;

(C) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973; and

(D) violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary.

(3) The MSWLF unit shall not cause or contribute to significant degradation of wetlands. The owner/operator shall demonstrate the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:

(A) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the MSWLF unit;

(B) erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;

(C) the volume and chemical nature of the waste managed in the MSWLF unit;

(D) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(E) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(F) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

(4) To the extent required under the Clean Water Act, §404 or applicable State wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (1) of this section, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands).

(5) Sufficient information shall be made available to the executive director to make a reasonable determination with respect to these demonstrations.

**§330.303. Fault Areas.**

(a) New MSWLF units and lateral expansions shall not be located within 200 feet of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the executive director that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment. The owner or operator shall submit the demonstration with a permit application, a permit amendment application, or a permit transfer request.

(b) Applications submitted for the operation of sites located within areas that may be subject to differential subsidence or active geological faulting shall include detailed fault studies. When an active fault is known to exist within one-half mile of the site, the site shall be investigated for unknown faults. Areas experiencing withdrawal of crude oil, natural gas, sulfur, etc., or significant amounts of groundwater shall be investigated in detail for the possibility of differential subsidence or faulting that could adversely affect the integrity of landfill liners. Such studies shall be conducted under the direct supervision of a professional engineer experienced in geotechnical engineering or a geologist qualified to evaluate such conditions. The studies shall establish the limits (both upthrown and downthrown) of the zones of influence of all active faulted areas within the site vicinity. Unless the applicant can provide substantial evidence that the zone of influence will not affect the site, no solid waste disposal shall be accomplished within a zone of influence of active geological faulting or differential subsidence because active faulting results in slippage along failure planes, thus creating preferred seepage paths for liquids. The studies shall include information or data on the items in paragraphs (1)-(12) of this subsection, as applicable:

- (1) structural damage to constructed facilities (roadways, railways, and buildings);
- (2) scarps in natural ground;
- (3) presence of surface depressions (sag ponds and ponded water);
- (4) lineations noted on aerial maps and topographic sheets;
- (5) structural control of natural streams;
- (6) vegetation changes;
- (7) crude oil and natural gas accumulations;
- (8) electrical spontaneous potential and resistivity logs (correlation of subsurface strata to check for stratigraphic offsets);
- (9) earth electrical resistivity surveys (indications of anomalies that may represent fault planes);

(10) open trench excavations (visual examinations to detect changes in subsoil texturing and/or weathering indicating stratigraphic offsets);

(11) changes in elevations of established benchmarks; and

(12) references to published geological literature pertaining to area conditions.

**§330.304. Seismic Impact Zones.**

For the purposes of this section, a seismic impact zone is defined as an area with a 10% or greater probability that the maximum horizontal acceleration in rock, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. Maximum horizontal acceleration is defined as the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment. Lithified earth material is defined as all rocks, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface. New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the executive director that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator shall submit the demonstration with a permit application, a permit amendment application, or a permit transfer. The demonstration shall become part of the operating record once approved.

**§330.305. Unstable Areas.**

For the purposes of this section, an unstable area is defined to be a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of a landfill's structural components responsible for preventing releases from the landfill; unstable areas can include poor foundation conditions, areas susceptible to mass movement, and karst terrains. Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area shall demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator shall submit the demonstration with a permit application, a permit amendment application, or a permit transfer. The demonstration shall become part of the operating record once approved. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(1) on-site or local soil conditions that may result in significant differential settling;

(2) on-site or local geologic or geomorphologic features; and

(3) on-site or local human-made features or events (both surface and subsurface).

